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| PPLICATION NO. FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|---|-------------------|----------------------|-----------------------------|-----------------|--|
| 09/960,345 | 09/24/2001 | Yukihiro Kusano | Q65935 | Q65935 4619 | |
| 7 | 590 07/27/2004 | EXAMINER | | | |
| SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC Suite 800 | | | TORRES VELAZQUEZ, NORCA LIZ | | |
| 2100 Pennsylva | ania Avenue, N.W. | ART UNIT | PAPER NUMBER | | |
| Washington, DC 20037-3213 | | | 1771 | | |

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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|---|---|--|--|---|-----------------|--|--|--|--|
| | | Application | on No. | Applicant(s) | - jC | | | | |
| Office Action Commence | | | 1 5 | KUSANO ET AL. | | | | | |
| | Office Action Summary | Examiner | | Art Unit | | | | | |
| ···· | | | orres-Velazquez | 1771 | | | | | |
| Period fo | The MAILING DATE of this communication ap or Reply | opears on the | e cover sheet with the c | orrespondence addre | ·SS | | | | |
| THE - Exte after - If the - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statut reply received by the Office later than three months after the mailing datent term adjustment. See 37 CFR 1.704(b). | .136(a). In no even ply within the stat d will apply and wa te, cause the app | ent, however, may a reply be tim utory minimum of thirty (30) day. Ill expire SIX (6) MONTHS from lication to become ABANDONE | nely filed s will be considered timely. the mailing date of this comm D (35 U.S.C. & 133) | unication. | | | | |
| Status | | | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 21 J | June 2004. | | | | | | | |
| 2a) <u></u> ☐ | 2a) ☐ This action is FINAL . 2b) ☑ This action is non-final. | | | | | | | | |
| 3)□ | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Dispositi | on of Claims | | | | | | | | |
| 5)□ 6)⊠ 7)□ | Claim(s) 1-4 and 6 is/are pending in the application of the above claim(s) is/are withdrated claim(s) is/are allowed. Claim(s) 1-4 and 6 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or | awn from co | | | | | | | |
| Applicati | on Papers | | | | | | | | |
| 9) | The specification is objected to by the Examine | er. | | | | | | | |
| 10) | The drawing(s) filed on is/are: a) acc | | | | | | | | |
| | Applicant may not request that any objection to the | | | | | | | | |
| 11) | Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the E | | | | • • | | | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | | | | | |
| a)[| Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea see the attached detailed Office action for a list | ts have been ts have been prity docume au (PCT Rule | n received. n received in Application ents have been receive e 17.2(a)). | on No d in this National Sta | ge | | | | |
| Attachment | c(s) | | | | | | | | |
| 2) 🔲 Notice 3) 🔯 Inform | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date <u>030204</u> . |) | 4) Interview Summary (Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other: | | 2) | | | | |

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DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 21, 2004 has been entered.

Response to Arguments

- 2. Applicant's arguments filed June 21, 2004 have been fully considered but they are not persuasive.
 - a. With regards to the rejection of claims 1-6 over YOSHIKAWA et al. (US 4,872,932) in view of JP 10-053010, Applicants argue that the present invention provides unexpectedly superior results and refer to comparative example comparing the example disclosed in the secondary reference in JP '010.

It is noted that Applicants are not addressing the rejection over the combination of references. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

b. Applicant's arguments and amendment, filed on June 21, 2004, with respect to objection of drawings and the rejection of claims 1-6 over 35 U.S.C. 112, second paragraph have been fully considered and are persuasive. The objection of the drawings

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has been withdrawn. The rejection of claims 1-6 under 35 U.S.C. 112, second paragraph has been withdrawn.

c. The obviousness-type double patenting rejection over copending application no. 10/019,250 in view of JP 10-053010 has been withdrawn in view of Applicant's Terminal Disclaimer filed June 21, 2004.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being obvious over YOSHIKAWA et al. (US 4,872,932) in view of JP 10-053010.

YOSHIKAWA et al. discloses a method for preparing rubbery composite materials and teaches that a metal such as zinc, copper, cobalt, and an alloy thereof can be integrated into a rubber composition to form a rubbery composite material exhibiting a firm bond between the components by press bonding the metal at a temperature which approximate to the temperature at which the rubber composition is usually heated for vulcanization; that these material can be readily deposited on a substrate as a thin film by a dry plating process such as vacuum deposition, ion plating, DC and RF magnetron sputtering, bipolar sputtering and RF sputtering processes; and that a rubber composition can firmly bond to the resulting metal thin film. (See Column 3 lines 34-45) The reference further teaches that the substrates that can be used in the practice of their invention are not particularly limited with respect to their material type, shape,

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and size, and that these may be properly selected depending on the intended application. (See Column 5, lines 18-41) Further, the reference teaches that the rubbery composite materials of their invention will find wide applications in steel tires, conveyor belts, and hoses, among others. (Column 4, lines 62-64)

While the teachings of the '932 reference do not preclude the use of a non-woven fabric, the use of non-woven fabrics as reinforcements for applications such as tires is well known as it is taught by the JP 10-053010 reference below.

The JP 10-053010 reference teaches the use of unwoven fabric (non-woven fabric) in a rubber-filament complex of a fiber reinforced member layer in a pneumatic radial tire. (Abstract)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the rubbery composite material and provide it with a non-woven fabric with the motivation of improving the rigidity and stability of the article including the composite material as disclosed by the JP 10-053010 reference.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Norca L. Torres-Velazquez Examiner Art Unit 1771

July 21, 2004